Accounting for Taste: Regulating Food Labeling in the "Affluent Society," 1945–1995

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Accounting for Taste examines the history of the US Food and Drug Administration's regulation of markets through labels as a form of public–private infrastructure, built through the ceaseless work (and antagonisms) of public regulators, the food industry, and expert advisors. From public hearings on setting "standards of identity" for foods to rule making on informative labels like the Nutrition Facts panel, it links a narrow history of institutional change in food regulation to broader cultural anxieties of twentieth-century America, arguing that the recurrence to informative labels as a political solution reflects a transformation in not only scientific understandings of dietary risk but also cultural understandings about the responsibility of consumers. In describing this "informational turn" in food politics, the dissertation foregrounds the important role of intermediaries, specifically consumer and health experts, and intermediate spaces, such as labels, in the framing of political debates about the production and consumption of everyday goods.

My dissertation traces a transformation in the way the US Food and Drug Administration (FDA) regulates food markets through labels, a transformation that parallels a broader cultural shift in the way we think about food, what it is, and what it's for. Following World War II,

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the FDA developed a set of standard recipes with fixed common name labels, or "standards of identity," for all mass-produced foods in an effort to rationalize the marketplace. In the 1950s and 1960s, public health concerns with overeating and the appearance of new diet foods capitalizing off the popular interest in the relationship between diet and health began to undermine this system. In response to these new understandings of diet and risk and anxieties about (over)abundant food supplies in an "affluent society,"[1] the FDA changed its food label and advertising policies. Rather than rely on standardized identities, starting in the 1970s the agency began to require companies to provide consumers nutritional information through new "informative labeling" (e.g., the Ingredients panel, Nutrition Facts label, and science-based health claims). This information would enable consumers to make responsible health decisions through market purchases.

By looking at the regulation of food labels throughout the second half of the twentieth century as a kind of public–private infrastructure for information, the FDA's turn to compositional labeling in the 1970s can be understood not merely as a shift in representation—from whole foods to foods as nutrients—but more broadly as a retooling of food markets to embed notions about personal responsibility for health into the ways that food was designed, marketed, and consumed. Through the study of this transformation in the FDA's policies on food labeling, health claims, and advertising, I explore more general questions about the changing relationships between the state, industry, experts, and citizens (as consumers) in the production of knowledge about goods: How do we know what we know about food and its relation to health? In what ways has that knowledge changed with the industrialization of food production and the increasing reliance on standardized informational tools like food labels?

Context

The increasing use of informative food labels can be situated within a much longer history of efforts by manufacturers, distributors, retailers, consumers, and the state to establish mechanisms for quality assurance and trust between buyer and seller.[2] The appearance of nutrition

1. Galbraith, *The Affluent Society*.

2. For an organizational framing of this longer history, see Cochoy, "A Brief History of 'Customers'," *Sociologie du travail*, S36–S56; Strasser, *Satisfaction Guaranteed*. For a critique of the notion of supply chains, see Hamilton, "Analyzing Commodity Chains." In *Food Chains*, Belasco and Horowitz, editors, 16–25. Cronon's historical account of "A Sack's Journey" and his interplay of the semiotics of packaging and the grading of commodities in the production of value in increasingly abstract marketplaces was a significant inspiration for the initial project. Cronon, *Nature's Metropolis*, 104–47.

labeling in the second half of the twentieth century was tied to the industrialization of food production and the concomitant "nutrition transition," a dietary shift from problems of malnutrition and underconsumption to an increase in diseases associated with overeating.[3] The nutrition transition was not just a medical, epidemiological transition, but had far reaching impacts for food consumption, business, and regulation. I follow several different threads of this story. There is a legal story, a change in the makeup and culture of the FDA as a regulatory institution and its tactics for policing "fairplay in the marketplace"[4]; there is a cultural story on the growing popularity of health foods and scientific ways of thinking about food[5]; and there is a business history, a story of how the manufacturing of processed foods was retooled to incorporate new health ingredients and target new niche markets, and eventually even mass markets.[6]

Nutrition labeling should be understood in the context of two converging movements. First, the nutrition label signaled the arrival of a new kind of shopper, citizen, and eater with the rise of what has been characterized as a new kind of health ethic or "healthism"—"the preoccupation with personal health as a primary focus for the definition and achievement of well-being" attained "through the modification of life styles, with or without therapeutic help."[7] The popularization of this way of knowing food was not limited to scientific texts, medical advice, or public health campaigns, but emerged from new modes of food consumption. New diet foods began to appear in the marketplace as early as the 1920s, which specifically embodied this "newer knowledge of nutrition." In part, the use of "vitamins," "nonnutritive sweeteners," and "low-saturated fats," in place of other "food additives," can be seen as an extension of an already ongoing chemical transformation of the food supply. Industrialization was increasingly converting the products of farm, dairy, and garden into mass

3. Caballero and Popkin, *The Nutrition Transition*.

4. On the history of the FDA and its changing institutional culture, see Young, *The Medical Messiahs*. Young, "Food and Drug Regulation under the USDA, 1906–1940," 134–42. Carpenter, *Reputation and Power*. These accounts mostly focus on drug regulation. For an excellent internal legal history of food and nutrition regulation, see Hutt, "Government Regulation of Health Claims in Food Labeling and Advertising," *Food Drug Cosmetic Law Journal*, 3. Hutt and Hutt, "History of Government Regulation of Adulteration and Misbranding of Food," *Food Drug Cosmetic Law Journal,* 2.

5. On the evolving cultural interest with dieting, food, and nutrition, see Levenstein, *Revolution at the Table*; Levenstein, *Paradox of Plenty*; and Schwartz, *Never Satisfied*.

6. Here the dissertation links in particularly with a growing literature on the politics of consumer culture, especially Jacobs, *Pocketbook Politics*; and Cohen, *A Consumers' Republic*.

7. Crawford, "Healthism and the Medicalization of Everyday Life," *International Journal of Health Services,* 365–88.

market "food," which entailed the literal reformulation of foodstuff through mechanical and chemical processes.[8] This "denaturing" of food—removing food from its "natural" contexts or "authentic" significations, reformulating it as nutritive (and nonnutritive) substances—challenged the intuitive or commonsense notions of food that informed the regulation of food markets before.

Yet, to some extent the tail wagged the dog. The new markets for healthy eating would also reconfigured industrial production. Advertising was not only a means by which producers could attempt to create demand for their products, but, in so far as it began to draw upon scientific ideas about diet and health, was also a medium that helped to popularize scientific and technical knowledge and ways of thinking about food. Labels, a site that sat at this intersection of production and consumption, was a place where producers, consumers, experts, and the state negotiated these changing significances of food.

This brings us to the second important movement, a late twentieth-century change in food politics and the politics of the consumer. The shift from a focus on undernourishment and food scarcity to problems associated with overconsumption had dramatic political consequences, because classical governance traditionally focused on improving health by increasing food supply. Changes in understandings of diet and health triggered a series of transformations in the way that political institutions dealt with the everyday management of food risk and responsibility. In particular, I describe an informational turn in regulation and food politics. Regulating through food labels reflected legally inflected norms about assumed risk and informed consent, such as the legal tradition of *caveat emptor*, "buyer beware," and also socially mediated constructions about identity formation and lifestyle politics.[9] Relying on food labels to regulate consumer behavior was a tactic that businesses and governments settled upon because of a particular political sensibility about the proper role of government, to frame consumption through representations of food instead of directly intervening in markets. The particular politics that labeling engendered was a faith that markets, if properly retooled, could be used to solve public health concerns. The turn to labeling, happening as it did in the early 1970s, fits within a broader political shift, a neoliberal turn in governance. Embracing lifestyle politics, of which nutrition labeling was only one example, was seen by many to

8. Another recent dissertation that tackles these interactions between the food industry and nutrition science in the reformulations of food is Schleifer, *Dissertation: Reforming Food*.

9. On the concept of *caveat emptor* and its significance for socially responsible labeling movements, see Frohlich, "Buyer Be-Aware." In *Global Food Security,* Romeo, Escajedo, and Emaldi, editors.

be a way that governments could democratically yield to its citizens' new consumer lifestyles. Regulatory tools such as informative labels used a language of self-care to convert socially interested concerns such as public health into an economic language of self-interest and new markets for food.[10]

I use the story of the food labeling and advertising and the introduction of the nutrition label in the 1970s as a way to bring together these different elements. One of my main arguments is that food labeling regulation is not after the fact.[11] While regulators did often struggle with how to adapt existing labeling laws to new foods, the inverse was also true. Companies specifically designed foods with existing or new regulations in mind. The relationship between regulation and business (and science) was a feedback loop where food labels were what economic sociologists describe as performative: an articulation of the thing that, through its articulation, makes it so.[12] Nutrition labeling became a way in which representing food as "nutritious" led producers to make foods "nutritious" (in other words to reformulate foods to be low fat, vitamin enriched, or low calorie).

Overview

The arc of my story is the FDA's shift from one system of regulation based on "standards of identities" to a second, informative labeling. Food standards of identity originated in the 1930s. The basic strategy was to use the product's common name as its chief identifier, and then impose an "imitation" label on substandard products. The FDA would hold public hearings for each and every mass-produced product before implementing a standard. Standards took the form of recipes with preapproved ingredients and fixed common names (such as

10. Seen in this light nutrition labeling can be understood as part of a "moralization of markets," a recent shift to market-embedded morality that Ronen Shamir has called the "Age of Responsibilization." Shamir, "The Age of Responsibilization," *Economy and Society,* 1–19. Sassatelli, *Consumer Culture*, 187. On the rise of lifestyle politics as situated in broader sociological trends of modernity, see Giddens, *Modernity and Self-Identity*.

11. Here I heed the call of Morton Keller many years ago that we move past the recurrent dualist conception in legal and business histories: the clash between economic "growth" (of private industries and markets) and social "order" (as set by public, governmental regulations). Keller, "Business History and Legal History," *The Business History Review*, 295–303.

12. I am using economic sociologists' notion of performative, which is the sense used in linguistics when talking of perfomative utterances. For more on this distinction between performativity versus misrepresentation, see Mitchell, "The Properties of Markets." In *Do Economists Make Markets?* MacKenzie, Muniesa, and Siu, editors.

"peanut butter" or "tomato soup").[13] These products did not carry an ingredients label, because ostensibly all that a consumer would need to know what he or she was buying, was the name of the product. The FDA created an exception category for "special dietary" foods, foods that a sick person was prescribed by her doctor to help her recover from an illness. These foods fell into a borderline category under US food law. They were not intended to act upon the body, nor "cure" a patient in the sense that a drug would, but doctors might utilize them for their special nutritional or health properties. This class of foods included products for diabetics, such as artificially sweetened diet foods and specially engineered low-calorie foods for obese patients. Under the standards of identity system, the FDA saw its mission to protect consumers as an effort to keep up the division between a normal, mass market for foods, and a special, marginal market for dietary products and drugs.

The problem for the FDA was the appearance in the 1950s and 1960s of several new kinds of popular diet foods. These can be broadly grouped into three product categories: (1) vitamin supplements and vitamin-enriched foods, (2) low-calorie products made with new artificial sweeteners, and (3) low-saturated fat foods and fatty acids labeling. Each of these products raised different concerns for regulators. Vitamins were used as health tonics raising concern about "nutrition quackery," the selling of ordinary products as if they had magical properties. Low-calorie foods were associated with vanity-dieting and risk-taking with new food additives. Low-fat foods embodied a medical approach to disease prevention that drew upon a new language of risk, which contravened the FDA's simple division of food versus drug. Each of them in different ways illustrates the slippage that occurs with food between languages of consumption and markets (focused on desire and self-interest) and the disciplining language of regulation and citizenship (focused on social responsibility and restraint).[14]

The dissertation is organized into five chronological chapters, following the story of how these products and corresponding diet science helped to undermine the FDA's previous regulatory system and usher in the new labeling system. It opens with the postwar research of epidemiologist Ancel Keys and the "diet-heart thesis," the proposition that heart disease was associated with and in part caused by diets high in saturated fats. Chapter 1 explores the emerging concern

13. One of the few published histories of these food standards hearings is Junod, "Food Standards in the United States." In *Food, Science, Policy and Regulation in the Twentieth Century.* David F. Smith and Jim Phillips, editors, 167–88.

14. On the contradictory languages of the consumer-citizen in diet advice, see Mol, "Good Taste," *Journal of Cultural Economy*, 269–83.

about these so-called "diseases of affluence," including scientists' concern with the underlying commercial roots of unhealthy excessive eating. In 1959, for example, Keys published with his wife a diet advice and cookbook with the intent of popularizing his findings about the role of fatty foods in risk of heart disease. In the book, the Keyses foreground the power of advertising to shape, or even distort consumers' natural tastes:

> Our own opinions about what we should or should not eat have the same [biological] basis [as primitive peoples] plus the influence of advertising and an increasing reflection of the reports from modern scientific studies on nutrition. We are bombarded with nutritional propaganda which, whether commercial or truly educational by intent, purports to be 'scientific.' And it unquestionably influences our choice of what we buy and eat.[15]

The cookbook and Ancel Keys's public advocacy of low-fat diets in the 1950s and 1960s can be understood as an effort to counterbalance such commercial manipulations. His work along with others would initiate a public "cholesterol controversy" over whether this new understanding of the dietary roots of heart disease was only of relevance to patients already under treatment for disease, or, as would become the paradigm, should be offered as advice to anyone, healthy or not, wanting to reduce future risk of disease.

Chapter 2 takes the story of Keys's diet-heart thesis and the "cholesterol controversy," and moves it into an institutional context, describing the FDA's reaction to the new health advice as it was appropriated by the market and deployed in food advertisements. The chapter describes the FDA's food standards hearings system as well as the agency's 1950s campaign against "nutrition quackery," introducing readers to the institutional culture and agency policies regarding dietary foods in the early 1960s. What follows is a point and counterpoint between the FDA and various food industries about the proper place of health information in food advertising. In this policy debate, I explore advertisements for the three kinds of new diet foods as a popular medium for educating the public about new ways of thinking about food.[16] Companies sought to push the line between what was a consumer "need" and what was "a want." One example is the artificial sweetener cyclamate, Sucaryl, made by Abbott Laboratories. Ads

15. Keys and Keys, *Eat Well and Stay Well,* 19. Here the Keyses identify the ambiguous and to them troubling boundary between scientific "education" and commercial "propaganda."

16. On interpreting advertisements as windows into consumer culture, see Lears, *Fables of Abundance*.

for Sucaryl in the late 1950s featured the "diet shopper" and used an ambiguous language, which, on the one hand, reinforced the sweetener's official status as a special dietetic product for patients, but on the other suggested its consumer base was growing beyond patients. For example, one ad campaign noted "She can't (or shouldn't) use sugar-sweetened products," recognizing that not all of its customers were diabetics who had to avoid sugars. A second example of new health advertisements for foods were the polyunsaturated fatty acids disclosures made on margarines and cooking oils, which amidst the "cholesterol controversy" of the 1960s constituted a problematic kind of implied health claim for reducing heart disease risk. Doctors, medical associations, company lawyers, and FDA officials argued over what kinds of health claims ought to be allowed for these foods. Margarine was no longer simply advertised as more economical (cheaper) and more convenient (more spreadable) than butter, its natural analog. Starting in the 1960s margarine products were sold as even better than the real thing. One of the themes that interest me is the confusion or play in these ad campaigns between what is advertising, what is education, and what one considers to be "merely" information.

The third chapter could easily have been titled "things fall apart." I look at three major events that occurred around 1969, which led to subsequent transformations in FDA policy and had profound impact on nutrition scientists' understanding of the public and government. The first event was the FDA food standards hearings on "special dietary" foods, which dragged on from 1968 to 1970, and which left much of the nutrition science community disenchanted with the New Deal regulatory system of food standards. The second was the 1969 White House Conference on Food, Nutrition, and Health.[17] In addition to its enormous public significance for food policy more generally, the conference included two panels that would have a direct impact on future changes in food labeling: a panel chaired by Ancel Keys on "Adults in an Affluent Society" and a panel on "New Foods" with Peter B. Hutt, an industry food lawyer who would go on to work at the FDA in the 1970s and play a central role in the introduction of nutrition labeling. The third event, the banning of the artificial sweetener cyclamate as a possible carcinogen, is treated only briefly, though it would play an important part in the subsequent 1970s politics surrounding the FDA. The chapter explores these three events as generating a kind of public "shock of recognition" that the food governance system was out of alignment with public sentiment and practice, and looks at how certain individuals and institutions, among

17. US White House. *White House Conference on Food, Nutrition, and Health*.

them the Nixon administration, dealt with public scandal and public understandings of food, diet, and one's responsibility for health.

The turning point in the dissertation occurs in Chapter 4. The various scandals resulted in cross-party dissatisfaction with the FDA and food standards come to be seen as clunky, burdensome, and a costly way of regulating food markets. In 1972 and 1973 the FDA introduced a series of rules that would change food labeling, the key changes being that they would now (1) require a "nutrition information" label on any foods that made an explicit or implied health claim (in this way it was "voluntary," only for those foods seeking a health market audience) and (2) only put the punitive "imitation" label on substitute foods deemed to be "nutritionally inferior," and not on value-added diet foods. The changes had the effect of freeing up industry to innovate and experiment more with diet foods without relying on the agency to endorse them through standards setting.

In the dissertation I characterize this turn from standards setting to information labeling as a neoliberal turn, rather than just deregulation, since it was in many ways an expansion of the FDA's powers of rule making. Information labeling reflected a neoliberal rationale: use labels to empower consumers to decide for themselves and empower companies to design "good" foods, but do not interfere directly in the consumer's "freedom of choice." It was an example of what Cass Sunstein calls "Informational Regulation," or regulation through disclosure, and was an increasingly popular style of governance over the course of the next two decades.[18] Its popularity owed to how it appealed across political parties. For progressives, information labeling continued the push to protect and expand the consumer's "right to know." For industry, labeling was an opportunity to create new food markets—for niche marketing and market segmentation, and was a preferable mode of regulation to outright product bans. Informational regulation was effectively a passive or persuasive mode of governing—interested consumers could find the information, if they sought it, but the information panel was not meant to be a government endorsement, one way or the other, about the product.

The fifth and final chapter serves as a capstone, introducing what is essentially the label that we know today, the "Nutrition Facts" panel. The FDA's introduction of the nutrition label and allowance of health claims in the early 1990s marked the ascendance of a new way of understanding food as a vehicle for personal health. The label was no longer voluntary. The FDA now required nutrition labels not only on foods sold and marketed for health purposes but on every packaged

18. Sunstein, "Informational Regulation and Informational Standing," *University of Pennsylvania Law Review*, 613.

food in the United States. It was therefore a significant expansion of the emerging paradigm that *all* foods have nutrition and health properties. Moreover, the new label was not just a content declaration, like the 1970s nutrition information panel, but rather a recommendation, incorporating the "% Daily Values" based on the US National Dietary Guidelines and Recommended Daily Allowances.

I describe the new nutrition label as an assemblage of vastly different political and professional backgrounds and interests—government regulators (FDA Center for Food Safety and Nutrition), public interest groups (Center for Science in the Public Interest), food industry, public health officials, techno-scientific experts (Association of Official Analytic Chemists), peer government (USDA), and even design firms (Greenfield-Belser Ltd.). Their different political interests not only shaped the design of the Nutrition Facts panel but were, to some extent, inscribed into the label. The label would be a medium for centralizing and certifying nutrition information. It would be a platform for special interest groups and lifestyle politics. It was a legal instrument for ensuring uniform rules and promoting a national food marketplace. It would be a way to "treat sick populations,"[19] to encourage individuals to act in the health interest of the population. It would be a validation of a professional association's authority to determine "correct" measurement standards and exchanges for very different food products. It was a modern, austere branding tool, which reinforced design principles of simplicity, functionality, and utility. It was an expansion of the government's role as public educator. Once inscribed into the Nutrition Facts panel, the label became a platform for each of these differing and in some cases contradictory agendas. I argue that this heterogeneity or disunity of interests constrained the label's effectiveness in any given realm, but ensured the label had a wide political mandate and numerous vested interests to sustain it down the road.

Central Themes

Throughout this story I return to several themes or arguments.

Imagining Consumers

One of my arguments is that the FDA's change from standards of identity to informative labeling presupposes a different kind of consumer,

19. Rose, "Sick Individuals and Sick Populations," *International Journal of Epidemiology*, 32–8.

and by extension, a different kind of relationship between the state and its citizens. I trace a progression in how regulators imagine consumers, from their concern with protecting the "ordinary consumer" in the 1950s, to a concern with empowering informed consumers in the 1970s and then special-needs consumers in the 1990s.[20] In this way I explore how the "active consumer,"[21] a consumer who is socially responsible, highly informed and discerning, and most important of all literate, emerges by the end of the century as the (imagined) protagonist of food labeling reforms.

This theme builds on Regina Blasczyzk's argument about the importance of studying intermediaries, such as consumer experts, in order to move past the recurrent dualism of productivist versus consumerist accounts of change in markets.[22] In the dissertation I not only explore the FDA and industry's use of consumer studies but also examine legal conceptions of consumers in tort law, the behavioral assumptions underlying scientific models of dieters, and political ideas about consumers voiced by consumer advocates and politicians. However, my exploration of how these different groups "imagine consumers" diverges from Blasczyzk's in significant ways. In my field of science studies there is great interest in the ways that experts, scientists and engineers, construct the self or "configure users" through the design of machine or product interfaces.[23] Rather than suggesting, as Blasczyzk does, that the experts in my story succeed as intermediaries between the public and businesses in "speaking" for an actual consumer, I argue that their models of consumer agency are performative. Through the design of food labels they are able to facilitate certain kinds of consumers and market choices, for example,

20. For more on this line of argumentation, see Frohlich, "Imaginer des consommateurs, constituer les sujets," *Sciences de la Société,* 11–27.

21. Trentmann, *The Making of the Consumer*, 5–7.

22. Blaszczyk, *Imagining Consumers*.

23. See, e.g., Woolgar, "Configuring the User." In *A Sociology of Monsters*; Turkle, "Cyberspace and Identity," *Contemporary Sociology,* 643–8; and Oudshoorn, Rommes, and Stienstra, "Configuring the User as Everybody," *Science, Technology & Human Values*, 30–63. A critical point from these studies is the "multiplicity of self." This project seeks to add nutrition to other market attributes as an important axis of food politics and marketing. The evolution of the "healthy consumer" has occurred alongside other consumer *personae*, such as the "middle-class" versus "working-class consumer" that surface in the politics of food pricing in Jacobs, "Democracy's 'Third Estate'," 27–51; the gendered consumer at the center of supermarket design in Deutsch, *Building a Housewife's Paradise*; or the "family" or community consumer" as contrasted with the individual consumer in studies of food commensuality, discussed in Kaufmann, *Casseroles, amour et crises*. The argument here is not that these different kinds of imagined consumers are mutually exclusive, but rather they represent different yet potentially overlapping axes of niche marketing, and that niche marketing is a means by which to sustain or engender new social identities.

healthy eating, over others. It is my contention that "the consumer" as a mode of being, or really different kinds of consumers, represents an important facet of modern society and its ideas about social behavior. Business history can thus contribute to a better understanding of the emergence of these modern ideas about the self and human agency, which inform not only marketing but also the sciences and politics.

Business and Regulation—A Marriage of Convenience

The twist in this story about the consumer is that FDA policy was as much (or more) directed at business as it was at consumers. While ostensibly the purpose of introducing nutrition labels in the 1970s and 1990s was to allow interested consumers to make healthier choices, I repeatedly found FDA regulators comment upon the importance of the label's indirect influence on consumption, which is to say, the way it would encourage manufacturers to reformulate their products whether or not most consumers actual read the label. In this respect I tie discussions about food labels back to the ways that regulation structures markets. Regulation was more than just statutory text but also a practice in enforcement where issues such as expediency or resource-constraints shape policy. It was important that enforcement happened in physical spaces, in stores or along distribution chains, where the materiality of food, its placement, and its representation mattered. For example, the classification of products as food or drug was a central institutional concern for the FDA, and was at the heart of business product innovation. In the story, I link the changes in food labels to a changing market organization, from grocers to supermarkets and druggists to pharmacies, and I describe how regulators' concerns with whether health foods are food or drug often centered on policy questions about where these special dietary foods could be properly sold (e.g., in special dietary section of stores or mixed in with similar, nondietary ordinary foods), as well as in what form (e.g., as a tablet resembling a medication or as enriched food). Regulatory questions about whether dietary supplements and vitamin-enriched foods in the 1950s, or "functional foods" in the 1990s, should be sold as drugs in drug stores and pharmacies, or as food-like products in supermarkets were really questions about who should be responsible for risk-taking and what kinds of consumers ought to have what kind of choices about new health technologies.[24]

This regulatory tactic of focusing on the spaces of consumption rather than consumers themselves, what some scholars have called

24. Rima Apple explores these literal turf wars between drug stores and grocers over vitamins and their placement in the 1950s, in Apple, *Vitamania*.

the "architecture of authority,"[25] fits within a broader argument about the need to study institutional forms when talking about regulatory bodies, the tactics they use for enforcement, and their relation to constantly evolving business practices.[26] Despite the continual bickering and apparent antagonisms in my story between FDA officials and the many different businesses interested in the new foods, industry repeatedly sought clarity from the FDA in its labeling policies in the interest of assuring consumer trust. (You could qualify this statement by saying that the devil was in the details.) All sides were willing to accept the idea of advertisements and labeling as a kind of educational space subject to public standards and some level of regulatory scrutiny and oversight. FDA labeling rules helped to standardize the information about food and thereby provide structure to the playing field in which companies operated. Conversely, FDA officials came to recognize they had neither the resources nor the political will to fully govern industry practice, and therefore adapted labeling requirements to the specific needs and concerns of industry so as to assure industry would comply with overall standards.

To describe this growing blend of public and private interests in the design of labels as neoliberal only gets us halfway to understanding the shift embodied by "informative labeling" in the 1970s.[27] A key transformation in the FDA's enforcement approach in the 1970s was to use rule making, along with soliciting public written comments, in place of face-to-face hearings with the public and industry. The "informational regulation" embodied in the nutrition information labeling rules of the 1970s restructured the way that the agency interacted with businesses, encouraging companies, consumers, and other interested parties to audit each other. The informational turn in regulatory enforcement, seen in this light, was partly about shifting the work for determining what is good or bad quality food onto businesses and consumers, to unburden the FDA with this responsibility while still shoring up the agency's central authority to adjudicate valid or invalid information.

25. Silbey and Ewick, "The Architecture of Authority." In *The Place of Law,* Sarat, editor, 77–108.

26. My interest in how material constraints and practices shape institutional forms and cultures was guided by Yates, *Control Through Communication*; and Vaughan, *The Challenger Launch Decision*. Though I was also pleasantly surprised to find a kindred interest in this approach to studying regulatory agencies in the dissertation by Lee Vinsel, *Federal Regulatory Management of the Automobile in the United States, 1966–1988*.

27. I avoid the use of the term "deregulation" even though the new rules certainly fit with other historians' description of a dismantling of the New Deal during the 1970s. Hamilton, *Trucking Country*. Nutrition labeling, however, was an expansion of regulatory powers, but through indirect means. In this way it parallels some of the market restructuring in the airline industry, but without the dismantling of the regulatory agency in question. Vietor, *Contrived Competition*.

Expertise in Everyday Life

A final theme in the dissertation is the role that the everyday and mundane plays in shaping meaning in food markets, the interplay between heterogenous spaces of consumption and the standardizing, technical narratives that institutions generate. Product labels are just one example of a wide variety of new tools, devices, and things that populate a modern landscape of impersonal relationships.[28] Nutrition labels can be understood as a technology of trust intended to standardize consumption and the many different ways consumers talk about food, diet, and health. Indeed, for me, what has been most interesting in this project has been going back to before nutrition labeling, to a time when only doctors and researchers knew or cared about "saturated fats," and then following that story forward. Seeing how, for a moment, the diet food advertisements we are accustomed to today were received by officials with skepticism, as potential quackery and sensationalism, or as unnecessary and nonobvious. And then watching how nutrition labels have come to reframe and in some ways lock in food policy and public discourses about diet and health.

By the time the Nutrition Facts panel was introduced in 1993, the label itself, appearing on millions of different products, became a statement of the "fact of labeling," which in some respects "[belied] the fundamental complexity of the Nutrition Facts label." As the president of the design firm hired to create the 1993 label put it: "something that you see over and over and over and over again, across all media or all packaging and the like. . . gradually seeps itself in the mind so that you start to. . . understand it and absorb it in ways that supersede reading."[29] This speaks to the problem of attention in shaping public understanding and the way that public and private institutions, through advertisements and product labels, have expanded the platform for technical frames for foods but also have to translate these technical frames to accommodate a diverse and nonstandard audience.

There are a lot of different and interesting consequences of the rise of informational food labeling. With nutrition labels, we see the rise of nutritionism and its increasing importance to social identity.[30] More generally, labels have contributed to an "informational turn," from *eating* foods to *reading* foods, forming one part of an explosion of literature and markets for self-education about food and health. However, what

28. For another example of how rules and political disputes come to shape everyday objects and by extension everyday habits, see Silbey and Cavicchi, "The Common Place of Law." In *Making Things Public*, Latour and Weibel, editors, 556–65.

29. Burkey Belser, president of design firm Greenfield-Belser Ltd., phone interview with the author, October 14, 2009.

30. Scrinis, "On the Ideology of Nutritionism," *Gastronomica*, 39–48.

probably most motivated me to tell this story was to resist the common triumphalist narrative that increased food labeling and information is evidence of improved consumer rights and empowerment. The proliferation of labels has invited criticisms that, to use an older language, it causes "consumer confusion," or in a newer lexicon, it results in "informational overload" or an "explosion of choice" at the supermarket.[31] Nutrition labels clearly fit into a sociological trend towards "healthism," an ideology of healthy living centered on individual responsibility and individualist behavioralism.[32] In this vein, I look at information labels not only as a transformation of our societal understanding of responsibility but also an institutional transformation in the relationship between citizens as consumers, businesses, and the state.

For these reasons I end my dissertation with what I see as a central irony of food labeling movements: that they seek to empower individual consumers to make choices for themselves, but ultimately rely heavily upon a backstage of expertise that determines what should go on the label and how they should be framed. In the words of one Reagan-era policy advisor who specialized in risk studies and the use of risk labels:

> It seems ironic that a program to control risks through information provision, thereby maximizing individual freedom, [still] entails increased government responsibility. One characteristic of the information age will be the increased interdependence of people, each of whom has specialized technical information that others will not be able to assess for themselves.[33]

This dissertation is an effort to document the emergence of that Information Age in food and diet markets, to look at the languages and politics of responsibility that surround it, and to uncover the assumptions that governed that transformation before it locked in to our present read-the-label culture.

31. On this explosion of choice and information overload with food, see Fischler, *L'omnivore*.

32. I see nutrition labels as fitting in with a broader policy interest in cultivating ethical consumption through framing tactics. In the UK, e.g., food policy scholars and industry have expressed interest in "choice editing," reframing marketplaces so as to encourage or discourage certain lines of socially undesirable products. It has a lot in common with the "choice architecture" models for policy-making put forward recently by American social scientists Richard Thaler and Cass Sunstein. Thaler and Sunstein, *Nudge*. Thaler and Sunstein advocate a "libertarian paternalism" where policymakers "nudge" people's everyday decisions towards social goals. Studying these tactics is of interest not only for understanding the impacts they have on market organization, but also for exploring experts' underlying normative assumptions and framings embedded in such choice architectures.

33. Hadden, *Read the Label*, 261–62.

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